GOVERNMENT OF INDIA
EARTH SCIENCES
LOK SABHA

UNSTARRED QUESTION NO:2339
ANSWERED ON:30.11.2016
GPS Radiosondes
Usendi Shri Vikram

Will the Minister of EARTH SCIENCES be pleased to state:

(a) whether India Meteorological Department (IMD) has purchased/ procured a technology for manufacturing GPS radiosondes in their own workshop under Make in India Project in the year 2011;
(b) if so, the details and the current status of the project;
(c) whether IMD has also purchased the components involving crores of rupees to manufacture GPS radiosondes under Make in India policy;
(d) if so, the details thereof and the number of radiosondes made under the said project till date and if not, the reasons therefor along with the details of persons responsible in this regard; and
(e) the steps taken by the Government in this regard along with the measures taken to stop the purchase of imported radiosondes?

Answer

THE MINISTER OF STATE FOR MINISTRY OF SCIENCE AND TECHNOLOGY AND MINISTRY OF EARTH SCIENCES
(SHRI Y. S. CHOWDARY)

(a-b) No Madam.India Meteorological Department (IMD) funded a project for the development of indigenous technology for GPS radiosondes to Society for Applied Microwave Electronics Engineering & Research (SAMEER), an autonomous society under Department of Electronics, Government of India. After successful demonstration of the development, the developed technology is available for production subject to cost benefit analysis involving cost of production, costs of sensor calibration facilities set up in-house and internationally competitive price scenario keeping in mind the overall requirement of radiosondes for operational upper air data acquisition from over 50 stations(twice a day) all through the year more so keeping in mind annual production capacity of about 4000-5000 in IMDs workshop.

(c-d) Although, some of the components have been procured, the feasibility for manufacturing GPS radiosondes in IMD workshop is not economically viable in view of the very small quantum of sondesbeing produced out of the overall 36000 required for the whole year observations.

So far to test and evaluate the quality of upper air data, 50 GPS radiosondes have been only made in workshop with quality/calibration support from m/s SAMEER. Test results were found to be satisfactory but bulk production is not contemplated due to the fact that additional calibration facilities need to be set up that further enhances the cost of production as compared to other indigenous options available from 3-4 certified vendors within India currently became possible with IMDs handholding.

Instead, GPS based pilot wind sondes can definitely be produced using the indigenous technology developed in workshop where in no additional sensor calibration facilities for temperature and moisture measurements need to be set up and thereby avoiding additional investments all together. By doing so, many of the components already procured can also be put to use while producing pilot wind sondes. IMD needs to make pilot wind measurements from about 60 stations daily all through the year (twice a day) also in addition to GPS radiosonde measurements.

(e) IMD had floated rate contract tender to procure GPS radiosondes for the year 2017-18 requirements that is open both for indigenous and foreign manufacturers. As the whole of the required quantum of sondescan not be supplied by a single vendor, India needs to support indigenous development of radio/pilot wind sondes notwithstanding to the small quantum of sonde production capacity in IMD workshop.